## **EAST Search History**

## EAST Search History (Prior Art)

| Ref#       | Hits  | Search Query  | DBs  | Default<br>Operator | Plurals | Time Stamp          |
|------------|-------|---|--|---------------------|---------|---------------------|
| L1         | 297   | ((graded or grading) near5<br>(dielectric)) same (dielectric<br>adj constant) | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND                 | ON      | 2010/07/06<br>09:25 |
| S1         | 2     | "20090026587"   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND                 | ON      | 2009/07/13<br>10:56 |
| S3         | 138   | 6498112 6479110 4789648.pn.   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND                 | ON      | 2009/07/13<br>10:59 |
| S4         | 516   | graded near3 dielectric   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND                 | ON      | 2009/07/13<br>11:15 |
| <b>S</b> 5 | 260   | S4 ("428".clas. or "257".clas.)   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND                 | ON      | 2009/07/13<br>11:15 |
| <b>S</b> 6 | 14953 | (low adj k) near5 dielectric  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND                 | ON      | 2009/07/13<br>13:21 |
| <b>S</b> 7 | 592   | S6 (graded or grading)  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND                 | ON      | 2009/07/13<br>13:21 |
| <b>S</b> 8 | 8     | S7 (rate near3 decrease)  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND                 | ON      | 2009/07/13<br>13:22 |
| S9         | 268   | ((graded or grading) near5<br>(dielectric)) same (dielectric<br>adj constant) | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND                 | ON      | 2009/07/13<br>13:47 |
| S10        | 76    | S9 (silane)   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND                 | ON      | 2009/07/13<br>13:49 |
| S11        | 42    | S10 (low adj k)   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND                 | ON      | 2009/07/13<br>13:57 |

| S12         | 6    | ((graded or grading) near5<br>rate) same (dielectric adj<br>constant)                                    | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/13<br>14:24 |
|-------------|------|--|--|-----|----|---------------------|
| S13         | 137  | (decreas\$3 near5 rate) with (dielectric adj constant)   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/13<br>14:36 |
| S14         | 28   | "6372661"  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/13<br>16:49 |
| S15         | 11   | ((graded or gradient) with (dielectric adj constant)) same (crack\$3)                                    | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/13<br>17:11 |
| S16         | 3    | S14 (gradient or graded).detd.   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/13<br>17:16 |
| S17         | 3359 | (dielectric adj constant) same<br>(grad\$4)  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/13<br>17:18 |
| <b>S</b> 18 | 29   | ((dielectric adj constant) same<br>(grad\$4)) with (stability or<br>stable or cracking or<br>mechanical) | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/13<br>17:19 |
| S19         | 2940 | 438/769,680,658,954.ccls.  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>09:13 |
| \$20        | 2406 | (graded or gradient or grading)<br>near5 dielectric  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>09:14 |
| S21         | 15   | S19 S20  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>09:14 |
| S22         | 140  | 6498112 6479110 4789648.pn.  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>09:27 |
| S23         | 18   | S20 S22  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>09:27 |
| S24         | 5    | ("6147009"   "6251770"  <br>"6525428"   "6570256"  <br>"6974762").PN.                                    | US-PGPUB;<br>USPAT; USOCR                          | AND | ON | 2009/07/14<br>09:30 |

| S25         | 532983 | "257".clas. or "438".clas.   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>09:53 |
|-------------|--------|--|--|-----|----|---------------------|
| S26         | 647    | S20 S25  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>09:53 |
| S27         | 22     | S26 (difference near5<br>(dielectric adj constant))  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>09:53 |
| S28         | 2      | ("20050233156"  <br>"20060009044").PN.   | US-PGPUB;<br>USPAT; USOCR                          | AND | ON | 2009/07/14<br>09:57 |
| S29         | 1037   | 428/610,547,FOR145.ccls.   | US-PGPUB;<br>USPAT; USOCR                          | AND | ON | 2009/07/14<br>10:00 |
| <b>S3</b> 0 | 0      | \$29 (difference near5<br>(dielectric adj constant))   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>10:00 |
| S31         | 1      | <u>გ</u> න න න න න න න න න න න න න න න න න න න   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14          |
| S32         | 1077   | ((dielectric adj constant) near5<br>(top or upper\$4)) same<br>((dielectric adj constant) near5<br>(bottom or lower\$4)) | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>11:04 |
| <b>S3</b> 3 | 25     | \$20 \$32  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>11:04 |
| S34         | 1      | (10/239493).APP.   | USPAT; USOCR                                       | AND | ON | 2009/07/14<br>11:06 |
| S35         | 4194   | (variable or varied or varies or vary) near5 (dielectric adj constant)   | US-PGPUB;<br>USPAT; USOCR                          | AND | ON | 2009/07/14<br>11:10 |
| S36         | 272    | S35 (low adj k)  | US-PGPUB;<br>USPAT; USOCR                          | AND | ON | 2009/07/14<br>11:10 |
| S37         | 64     | S35 (low adj k).ab.  | US-PGPUB;<br>USPAT; USOCR                          | AND | ON | 2009/07/14<br>11:10 |
| S38         | 39     | (third near5 (gradient or graded)) with dielectric   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>13:59 |
| S39         | 18     | (third near3 (gradient or graded)) with dielectric   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>14:01 |

| <b>S</b> 40 | 399  | (US-20090026587-\$ or US-20030153198-\$ or US-20030153198-\$ or US-20030032281-\$ or US-20030161959-\$ or US-20040161617-\$ or US-20030129826-\$ or US-20010055672-\$ or US-2003003768-\$ or US-20030048666-\$ or US-20030048666-\$ or US-20030048666-\$ or US-200300141499-\$ or US-20030141499-\$ or US-20030141499-\$ or US-20020074309-\$ or US-20020074309-\$ or US-20020074309-\$ or US-20020084257-\$ or US-20020084257-\$ or US-6498112-\$ or US-6479110-\$ or US-4789648-\$ or US-6570256-\$ or US-7524528-\$ or US-6518200-\$ or US-6525428-\$ or US-6534395-\$ or US-6602779-\$ or US-7273823-\$ or US-6372661-\$ or US-7200460-\$ or US-6495208-\$ or US-7166544-\$ or US-7102232-\$ or US-6670022-\$ or US-6340435-\$ or US-6756674-\$).did. or (US-20020037442-\$).did. | US-PGPUB;<br>USPAT;<br>DERWENT                     | AND | S  | 2009/07/14          |
|-------------|------|---|--|-----|----|---------------------|
| S41         | 8    | S40 (third adj layer)   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>14:33 |
| S42         | 15   | (third adj layer) same ((graded<br>or gradient or grading) near5<br>dielectric)   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>14:34 |
| S43         | 9695 | ((decreas\$3 or reduc\$3) near5<br>(dielectric adj constant)) same<br>(layer or film)   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>14:41 |
| S44         | 68   | ((decreas\$3 or reduc\$3) near5<br>(dielectric adj constant)) same<br>((graded or gradient or<br>grading) near5 dielectric)   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>14:41 |
| S45         | 15   | "5144391"   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>14:54 |
| S46         | 3    | S45 (low adj dielectric)  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>14:56 |

| S47          | 346  | (second near5 graded) (third near5 graded)  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>15:02 |
|--------------|------|---|--|-----|----|---------------------|
| S48          | 28   | S20 S47   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>15:02 |
| S49          | 35   | S38 ((second near5 (gradient or graded)) with dielectric)   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>15:12 |
| S50          | 5    | ("6147009"   "6251770"  <br>"6525428"   "6570256"  <br>"6974762").PN.   | US-PGPUB;<br>USPAT; USOCR                          | AND | ON | 2009/07/14<br>15:57 |
| S51          | 24   | ("6570256").URPN.   | USPAT  | AND | ON | 2009/07/14<br>16:02 |
| <b>\$</b> 52 | 14   | ("5885751"   "5904952"  <br>"5945155"   "5981000"  <br>"6054379"   "6059935"  <br>"6072227"   "6087009"  <br>"6090530"   "6340435"  <br>"6346747"   "6362091"  <br>"6407011"   "6429122").PN. | US-PGPUB;<br>USPAT; USOCR                          | AND | ON | 2009/07/14<br>16:06 |
| <b>S5</b> 3  | 1    | S52 (gradient or graded)  | US-PGPUB;<br>USPAT; USOCR                          | AND | ON | 2009/07/14<br>16:19 |
| S54          | 275  | ((second near5 (gradient or graded)) with dielectric)   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>16:27 |
| <b>S5</b> 5  | 9    | S54 (low adj dielectric).ab.  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>16:28 |
| S56          | 137  | ((second near3 (gradient or graded)) with dielectric)   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/07/14<br>16:29 |
| S57          | 2402 | (graded or gradient) near5<br>(dielectric)  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/12/30<br>16:26 |
| S58          | 79   | ((graded or gradient) near5<br>(dielectric)) same (single near3<br>(layer or film))   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/12/30<br>16:26 |
| S59          | 118  | ((graded or gradient or profil<br>\$2) near5 (dielectric)) same<br>(single near3 (layer or film))   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/12/30<br>16:57 |

| S60         | 1676 | (semi adj transparent) near5<br>(metal)  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/12/30<br>17:03 |
|-------------|------|--|--|-----|----|---------------------|
| S61         | 115  | S60 (pigment.ab.)  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/12/30<br>17:04 |
| S62         | 3    | ("4075153"   "5135812"  <br>"5320673").PN.   | US-PGPUB;<br>USPAT; USOCR                          | AND | ON | 2009/12/30<br>17:06 |
| S63         | 101  | "3438796"  | US-PGPUB;<br>USPAT; USOCR                          | AND | ON | 2009/12/30<br>17:13 |
| S64         | 23   | S63 (semi adj transparent)   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/12/30<br>17:17 |
| S65         | 2717 | (semi adj transparent) same<br>(core or center or central)   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/12/30<br>17:24 |
| <b>S6</b> 6 | 49   | S65 (pigment.ab.)  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/12/30<br>17:24 |
| S67         | 392  | (semi adj transparent) near5<br>(core or center or central)  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/12/30<br>17:26 |
| <b>S</b> 68 | 8    | S67 (pigment.ab.)  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/12/30<br>17:26 |
| S69         | 910  | ((semi or partially or partial or part or partly) adj transparent) near5 (core or center or central) | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/12/30<br>17:32 |
| S70         | 13   | S69 (pigment.ab.)  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/12/30<br>17:32 |
| S71         | 11   | "6156115"  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/12/30<br>17:35 |
| S72         | 190  | "4434010"  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/12/30<br>17:49 |
| S73         | 0    | S72 S69  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/12/30<br>17:50 |

| S74 | 13  | S65 S72   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | 3  | 2009/12/30<br>17:52 |
|-----|-----|-----------|--|-----|----|---------------------|
| S75 | 525 | "4789648" | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/12/30<br>18:26 |
| S76 | 1   | S75 S57   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | AND | ON | 2009/12/30<br>18:26 |

## **EAST Search History (Interference)**

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## 7/6/2010 9:27:25 AM

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